United States Patent [19]

Kaetsu et al.

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[54] **IMMOBILIZATION OF ENZYMES OR BACTERIAL CELLS**

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Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 523,162, Nov. 12, 1974, abandoned.

[30] **Foreign Application Priority Data**

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[52] **U.S. Cl.** **435/182;** 260/8; 435/173

[58] **Field of Search** ..... 195/59, 63, 68, DIG. 4; 260/8; 204/159.16, 159.22

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[57] **ABSTRACT**

This invention relates to polymer composition having fixed bacterial cells and/or fixed enzyme, in which the enzyme or cells are dispersed within the polymer. The polymer composition is prepared by mixing an aqueous enzyme solution or an aqueous dispersion of bacterial cells with one or more monomers selected from the group consisting of hydroxyethyl methacrylate, hydroxyethyl acrylate, hydroxypropyl methacrylate and hydroxypropyl acrylate and then polymerizing or copolymerizing the monomer(s) contained in the mixture by means of ionizing radiation at a temperature at which water in the mixture is frozen.

9 Claims, No Drawings